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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,712	02/07/2002	Shuji Arakawa	VX012357 PCT	9001
21369	7590	08/26/2005	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DR. SUITE 101 RESTON, VA 20191			GANTT, ALAN T	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/936,712	ARAKAWA ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Alan T. Gantt	2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 07 January 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 37-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 38,40,46,47,52 and 53 is/are allowed.
- 6) Claim(s) 37,39,41-45,48-51 and 54-56 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments filed 1/7/05 have been fully considered. Since applicant has amended claims to be more comprehensible, a non-final art rejection is presented below.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 37 is rejected under 35 U.S.C. 102(e) as being anticipated by Smith.

Regarding claim 37, Smith discloses a system for controlling vehicles to provide transportation services without the need for human intervention. The system includes processing circuitry that instructs vehicles to provide services and monitors vehicle activities by reviewing the records and automatically obtaining vehicle activity records and contains a variety of methods for obtaining and updating vehicle activity information. Thus, Smith includes an apparatus for communicating data about mobile vehicles that comprises:

a plurality of mobile vehicles (col. 1, lines 13 and 14), a plurality of terminals (col. 8, lines 51-60 and col. 17, lines 7-17), and communication means for transmitting

and receiving information between the plurality of mobile vehicles and the plurality of terminals (col. 23, line 8 to col. 24, line 28);

the information including mobile vehicle data and terminal data (col. 23, lines 21-45); the mobile vehicle data including mobile vehicle identification data for identifying an individual mobile vehicle of the plurality of mobile vehicles (col. 23, lines 30-35), and mobile vehicle content identification data for identifying specific data in the mobile vehicle data (col. 23, lines 21-45); and the terminal data including terminal identification data for identifying an individual terminal of the plurality of terminals (col. 17, line 62 to col. 18, line 16 – the terminal identification is tied to the vehicle identification and transaction ID); an input terminal of the plurality of terminals including input means for inputting a data request (col. 8, lines 51-60); the data request including the mobile vehicle identification data, the mobile vehicle content identification data, and the terminal identification data (col. 23, lines 21-45 terminal id is tied to the vehicle id unless it is a mobile data terminal);

wherein:

when the data request is input into the input terminal; the input terminal transmits the data request, via the communication means, to the individual mobile vehicle of the plurality of mobile vehicles that is identified by the mobile vehicle identification data in the data request (col. 17, lines 61 to col. 18, line 16); and the individual mobile vehicle receiving the data request acquires the mobile vehicle data corresponding to the mobile vehicle content identification data in the data request (col. 23, lines 21-45); and transmits the acquired mobile vehicle data, via the communication means, to an output terminal of

the plurality of terminals identified by the terminal identification data in the data request (col. 23, lines 37-45).

Regarding claim 39, Smith meets the limitation - The apparatus for communicating data about mobile vehicles according to claim 37, wherein when the data request of the input terminal includes an instruction work content for the individual mobile vehicle (col. 3, lines 55-62 and col. 23, lines 21-45 – the appointment time would represent the instruction work content), and the instruction work content is presented by presentation means within the individual mobile vehicle (col. 3, line 55-62); the presentation means presenting the instruction work content by at least one of a visual image, an audio signal, and a printout within the individual mobile vehicle (col. 17, lines 62 to col. 18, line 16 –visual image on the terminal).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wooten, in view of Prabhakaran.

Regarding claim 41, Wooten discloses a method and apparatus for remote monitoring and configuration of electrical control systems. Wooten employs message transmitting stations and

relay stations to send messages to mobile commercial freight transportation vehicles. Thus,

Wooten discloses an apparatus for communicating data about mobile vehicles that comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals; (col. 4, lines 13-27)

an input terminal of the plurality terminals inputting a data request including mobile vehicle information relating to an individual mobile vehicle of the plurality of mobile vehicles and receiving information in response to the data request; (col. 14, lines 33-59)

the input terminal including display means for displaying mobile vehicle identifiers for identifying the plurality of mobile vehicles (col. Col. 15, lines 8-28)

Wooten is silent regarding updating aspects of the display associated with the on-board terminals.

Prabhakaran discloses a system for fleet management having a main process and client processes. The system has a graphical user interface apparatus having a display and includes mobile information center to which is provided vehicle position data and the like.

the display means including means for altering a display mode of the display means, based on one of, communication progression between the plurality of terminals and the plurality of mobile vehicles (col. 7, lines 12-19), and an elapsed of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles. (col. 13, lines 50-56)

Wooten and Prabhakaran are combinable because they share a common endeavor, namely fleet management. At the time of the applicant's invention it would have been obvious to modify Wooten to include means within the display to communication progression as done by Prabhakaran so the user will know the current status of the system.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 42, and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Prabhakaran .

Regarding claim 42, Prabhakaran discloses a system for fleet management having a main process and client processes. The system has a graphical user interface apparatus having a display and includes mobile information center to which is provided vehicle position data and the like. Prabhakaran meets the limitation for an apparatus for communicating data about mobile vehicles that comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals; (col. 4, lines 14-57)

a receiving terminal of the plurality terminals receiving one of unrequested information from a mobile vehicle of the plurality of mobile vehicles and

requested information from a mobile vehicle in response to a data request by the input terminal; (col. 37, lines 37-52)

the plurality of terminals including display means, the display means displaying mobile vehicle identifiers for the plurality of mobile vehicles (col. 6, line 65 to col. 7, line 19), and means for altering a display mode of the display means based on an elapsed time since a previous display of information for the plurality of mobile vehicles. (col. 6, line 65 to col. 7, line 19 and col., 37, lines 37-52)

Regarding claim 43, Prabhakaran discloses a system for fleet management having a main process and client processes. The system has a graphical user interface apparatus having a display and includes mobile information center to which is provided vehicle position data and the like. Prabhakaran meets the limitation for an apparatus for communicating data about vehicles, a category that includes construction machines that comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals (col. 4, lines 14-57); construction machine information relating to an individual construction machine of the plurality of construction machines being transmitted, via the communication means, from the individual construction machine to a receiving terminal of the plurality of terminals (col. 4, lines 14-57); the receiving terminal including a screen for

displaying the construction machine information; (col. 4, lines 14-57 – Prabhakaran seeks to include any type of mobile vehicle) a management area or a beyond-management area being established for each of the plurality of construction machines; (Figure 1 and col. 4, lines 22-35 and 49-57 – allows for map indications for vehicle locations) and the construction machine information including information that a construction machine has either departed from the management area or entered the beyond-management area, and the construction machine information being displayed on the screen of the receiving terminal. (col. 4, lines 49-57)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 49, 55, and 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prabhakaran.**

Regarding claim 49, Prabhakaran discloses a system for fleet management having a main process and client processes as stated above for claim 43. Prabhakaran is silent regarding whether the receiving terminal is portable.

However, the examiner takes Official Notice that it is well known to utilize a portable receiving terminal and that it would have been obvious to modify Prabhakaran or the combination to utilize such a portable terminal since the miniaturization of components allows for complex applications to still be able to be handled by a portable terminal device.

Regarding claims 55 and 56, Prabhakaran discloses a system for fleet management having a main process and client processes as stated above for claim 43. Prabhakaran is silent regarding information presented on the main presentation screen or first presentation screen of the receiving terminal at startup.

However, the examiner takes Official Notice that it is well known to utilize a given default presentation screen depending of the requirements of the designer or user and that it would have been obvious to modify the Prabhakaran to include to include the system information on the main screen at startup since the current status of the system will be shown and any peculiarities can be quickly dealt with.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 44, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prabhakaran, in view of Dickrell et al.**

Regarding claim 44, Prabhakaran discloses a system for fleet management having a main process and client processes. The system has a graphical user interface apparatus having a display and includes mobile information center to which is provided vehicle position data and the like. Prabhakaran meets the limitation for an apparatus for communicating data about construction machines, that comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals (col. 4, lines 14-57); construction machine information relating to an individual construction machine of the plurality of construction machines being transmitted, via the communication means, from the individual construction machine to a receiving terminal of the plurality of terminals; (col. 4, lines 14-57 – Prabhakaran seeks to include any type of mobile vehicle)

Prabhakaran is silent regarding the collecting of information as to whether an engine has started at a given time.

Dickrell discloses an apparatus and method for sensing, recording, and displaying data associated with a vehicle and its associated engine. Dickrell meets the following limitation:

the construction machine information including information that an engine of one of the construction machines was started in a specific time frame (col. 5, lines 43-52), and the construction machine information being displayed on a

screen of the individual construction machine. (col. 2, line 42 to col. 3, line 22 and col. 6, lines 33-47)

Prabhakaran and Dickrell are combinable because they share a common endeavor, namely remote fleet management. At the time of the applicant's invention it would have been obvious to modify Prabhakaran to sense when an engine has started as done by Dickrell to have a greater feel for what's happening with the fleet.

Regarding claim 50, the examiner takes Official Notice that it is well known to utilize a portable receiving terminal and that it would have been obvious to modify Prabhakaran or the combination to utilize such a portable terminal since the miniaturization of components allows for complex applications to still be able to be handled by a portable terminal device.

**Claims 45 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prabhakaran, in view of Nicol et al.**

Regarding claim 45, Prabhakaran discloses a system for fleet management having a main process and client processes. The system has a graphical user interface apparatus having a display and includes mobile information center to which is provided vehicle position data and the like. Prabhakaran meets the limitation for an apparatus for communicating data about mobile vehicles that comprises,

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals, and information related to an individual mobile vehicle of the plurality of mobile vehicles being transmitted from the individual mobile vehicle to a receiving terminal of the plurality of terminals, via the communication means, and displayed on a screen of the receiving terminal;  
(col. 4, lines 14-57 – Prabhakaran seeks to include any type of mobile vehicle)  
the plurality of mobile vehicles including an internal power supply; (this feature is inherent in automobile design)

Prabhakaran is silent regarding monitoring of power supply voltages of the individual vehicles.

Nicol teaches a vehicle monitoring apparatus that includes sensors as part of a power supply and monitor circuit and senses whether the engine is running by detecting whether there is a fluctuation in the voltage supplied by the power supply. Thus, Nicol meets the limitation:  
the mobile vehicle information including information that voltage of the power supply has fallen to or below a prescribed level that is displayed on the screen of the receiving terminal. (col. 7, line 55 to col. 8, line 12)

Prabhakaran and Nicol are combinable because they share a common endeavor, monitoring of vehicle related items. At the time of the applicant's invention it would have been obvious to modify Prabhakaran to sense when an engine has started as done by Nicol to have a greater feel for what's happening with the fleet.

Regarding claim 51, the examiner takes Official Notice that it is well known to utilize a portable receiving terminal and that it would have been obvious to modify Prabhakaran or the combination to utilize such a portable terminal since the miniaturization of components allows for complex applications to still be able to be handled by a portable terminal device.

**Claim 48 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prabhakaran., in view of Koga et al.**

Regarding claim 48, Prabhakaran discloses a system for fleet management having a main process and client processes. The system has a graphical user interface apparatus having a display and includes mobile information center to which is provided vehicle position data and the like. Prabhakaran meets the limitations for an apparatus for communicating data about construction machines, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals (col. 4, lines 14-57), and construction machine information relating to an individual construction machine of the plurality construction machines being transmitted, via the communication means, from the individual construction machine to a receiving terminal of the plurality of terminals, the receiving terminal including a screen for displaying the

construction machine information; (col. 4, lines 14-57 – Prabhakaran seeks to include any type of mobile vehicle)

Prabhakaran is silent regarding an upper limit travel distance.

Koga discloses a fuel use limiter-equipped hybrid electric car with an electric drive motor capable of driving wheels by electric power from a battery unit. Koga meets the following limitations

an upper limit of travel distance being determined for each of the plurality of construction machines; (col. 14, lines 9-19) and  
the screen of the receiving terminal displaying the construction machine information that one of the construction machines traveled beyond the upper limit (col. 14, lines 9-19)

Prabhakaran and Koga are combinable because they share a common endeavor, namely, devices utilizing displays to interpret conditions of a vehicle. At the time of the applicant's invention it would have been obvious to modify Prabhakaran to monitor an upper limit for distance traveled and present the results to a display as done by Koga to insure that fuel is not depleted.

Regarding claim 54, the examiner takes Official Notice that it is well known to utilize a portable receiving terminal and that it would have been obvious to modify Prabhakaran or the combination to utilize such a portable terminal since the miniaturization of components allows for complex applications to still be able to be handled by a portable terminal device.

***Allowable Subject Matter***

Claims 38, 40, 46, 47, 52, and 53 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 38, although the Prabhakaran reference includes servers that perform some of the functions of the claim, however, the request terminal of the plurality of request terminals with subsequent data requests from the memory communicating with the server and the transmitting of the acquired mobile vehicle data to the request terminal were neither found, suggested, nor made evident by the prior art.

Regarding claim 46, although remote starting and deactivation of internal combustion engines are known in the art as shown by Dyches et al. and Yamada et al., a screen set up for displaying corresponding mobile vehicles set in the operation suspended condition by start lock setting means and the operation-suspended condition released by start lock release means in such a way as to give an overview of the inventory were neither found, suggested nor made evident by the prior art.

Regarding claim 47, a display screen of the receiving terminal capable of displaying activated mobile vehicles even though the activated mobile vehicles were set in an operation-suspended condition by the start lock setting means was neither found, suggested, nor made evident by the prior art.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamada et al. discloses a power transmitting apparatus attached to a crankshaft of an engine for controlling the clutch motor and assist motor.

Lopez discloses a two-channel remote control system for an automobile.

Dyches et al. discloses an internal combustion engine starting apparatus that uses a signal from a current sensor to determine when the engine is energized and when the starter motor should be de-energized.

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (571) 272-7878. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (571) 227-8300.

Any inquiry of a general nature or relating to this application should be directed to Supervisory Patent Examiner Nay Maung at telephone number (571) 272-7882.

  
Alan T. Gantt

July 5, 2005

  
NICK CORSARO  
PRIMARY EXAMINER